

Chairman's Report

Professor Adrian Polglase

The 2005 academic year is almost halfway through and I am pleased to have the opportunity to update you on our activities. The Tackling Bowel Cancer Foundation hosted a Bottom Line Luncheon in August last year where the bowel cancer epidemic was again highlighted and where the Governor of the Reserve Bank, Mr Ian Macfarlane spoke at length on the Bottom Line as it pertains to some historical aspects in regard to the Australian economy. A copy of his speech can be viewed at http://www.rba.gov.au/Speeches/2004/sp_gov_250804.html. Considerable funds were raised some of which have been directed towards a new project from the Tackling Bowel Cancer Foundation. Brochures have been circulated to 370 general practitioner clinics in the Melbourne metropolitan area. The brochures are aimed at educating the community about bowel cancer and encouraging them to be proactive about their own bowel cancer risks. A consulting company has been employed to coordinate this project and assist with the collation of data to determine the effectiveness of this initiative. These results will be presented in a forthcoming newsletter.

Research into bowel health and disease is of course a very high priority and accordingly this year we have appointed Dr Jenny Chong as a Research Fellow to assist in the supervision of our Painbuster trial. This is a prospective randomised double blind study to explore the effects of local anaesthetic being continuously injected into the surgical wound after colorectal surgery as compared with other regimens of pain management. The trial has been running for almost 18 months and we have subsequently accrued 170 patients. It is likely it will continue for another 12 months before completion. No results will be available until that time. Dr Chong will also assist in medical student teaching at Cabrini and be involved in surgical assistance at major operations.

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The Melbourne Ashkenazi Bowel Cancer Study II

Ashkenazi Jews as an ethnic group appear to have the highest incidence of bowel cancer in the world. It is thought to be as high as 1 in 10-12 (World Health Organisation data) compared to a general population risk of 1 in 20. It is known that a gene variant known as the I1307K is a cancer predisposition gene. Recent data collected at Cabrini Hospital through Stage I of the Melbourne Ashkenazi Bowel Cancer Study (MABCS) supports the World Health Organisation data, with 10% of the Ashkenazi Jewish community being identified as carriers of I1307K.

The next step for the MABCS is to move testing for the I1307K gene variant from the research setting and into clinical practice to clarify the association with a family history of cancer and determine the characteristics of colorectal cancers that arise in Jewish patients carrying the gene alteration. This is a first for Australia and one of the first of such studies in the world.

Knowing the clinical relevance of the APC I1307K gene variant will potentially be of great benefit to clinicians treating the Ashkenazi Jewish population for colorectal cancer.

Enquiries on the study can be directed to Bev Warner in the Family Cancer Clinic at Cabrini on: 9508 1363

Pardon me?

A recent study by the Cancer Research UK Psychosocial Oncology Group at the University of Sussex revealed that medical terms used by doctors in cancer consultations were more confusing than enlightening. Only half of the participants in the study knew what 'remission' meant and 55 per cent had just a sketchy knowledge of bowel and breast screening techniques. According to a 2004 government study on the state of the nation's health more than 75 per cent of British patients forget what their doctors tell them as soon as they leave the surgery.

A clear understanding of the situation can improve a patient's treatment, recovery and quality of life

Professor Lesley Fallonfield

Similar health literacy results were also reported in a study sponsored by the Partnership for Clear Health Communication. As many as half of all adults studied were not as acquainted with health terms as they should be. Researchers found many of those who completed the questionnaire thought they understood terms when they were actually quite confused by them. This 'ignorance' can have potentially dire consequences as it can affect decision making about appropriate treatments. This research demonstrated that the language engaged by the doctor can either assist or prevent patients' understanding and retention of information.

Some recommended health sites are:

www.healthinsite.gov.au

www.betterhealth.vic.gov.au

Some useful definitions.

Adenocarcinoma is a cancer of glandular tissue. For example, an adenocarcinoma of the bowel is a cancer of the mucus-secreting cells lining the bowel.

Adenoma is a benign polyp formed from glandular structures lining the bowel which may later develop into cancer.

Computed tomography (CT scan) is an image produced by a CT scanner- Xrays are taken from different angles and are put together by a computer to generate a series of cross-sections (or 'slices' of the part of the body being scanned. This can build up a very detailed picture of the inside of the body, and provide accurate information on the size and position of normal & abnormal structures.

DNA repair. The DNA in the nucleus of a cell is constantly being damaged. To prevent cancer occurring, cells have a number of sophisticated mechanisms to repair the damage. There are at least 130 genes involved in repairing a cell's DNA. If any of the DNA repair genes themselves become damaged, a cell is more likely to become cancerous, as it cannot repair future damage as efficiently.

Dukes' classification. A system of classifying bowel cancer according to its stage. There are four groups, Dukes'A to Dukes'D. 'A' is the earliest cancer and 'D' is a cancer that has spread.

Faecal Occult Blood Test also known as a **FOBT** is a test to detect hidden blood in the faeces. This test can be performed in the privacy of your home.

Genetic test. A test that analyses the DNA in our cells to determine how those cells will behave.

Malignant. A tumour that is able to spread and grow in other parts of the body. Malignant is the opposite of benign.

Metastasis. The process by which cancer cells break away from the primary tumour and spread to other distant sites around the body to form secondary tumours. A metastasis (plural: metastases) is also the name sometimes given to these secondary cancers.

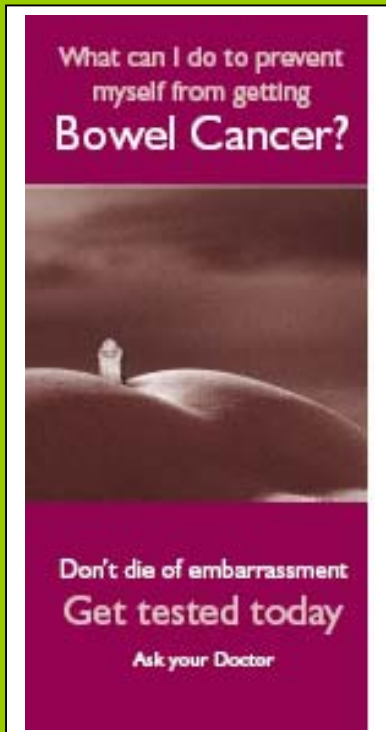
Mortality refers to the number of people who have died from cancer and is usually expressed as the number of deaths each year in a specified area. The mortality rate is the number of people who die from cancer per 100,000 population.

Neo-adjuvant therapy: given before the main treatment to improve its effectiveness. For example, rectal cancer is sometimes treated with chemotherapy & radiotherapy prior to surgery to shrink the tumour and make it easier to remove.

Survival refers to the percentage of people still alive 1,3,5 and ten years after they have been diagnosed with cancer. The 5 year survival rate is often quoted. Relative survival takes into account the fact that the person may have died even if they did not have cancer; it is relative to the rest of the population.

Years of life lost is a method to refine the traditional measure of mortality rates by providing a weighting for deaths at different ages. It represents the number of years not lived by an individual from birth to age 75. This indicator places more weight on causes of death at older ages.

"Tackling Bowel Cancer"



On March 1st 2005 Tackling Bowel Cancer Foundation launched a bowel cancer awareness brochure at 370 Melbourne Metropolitan General Practices Clinics through Infomed. The brochure will run for 6-months and was composed to stimulate patients to discuss their individual risk factors of developing bowel cancer with their General Practitioner. The Infomed service was chosen as it is designed to provide patients in GP waiting rooms with easy access and constant visual exposure to health information.

In addition to the community brochure an education program to raise awareness of bowel cancer and to encourage screening of "at risk" staff at Cabrini is being developed with the aim of creating a bowel cancer free zone at Cabrini Health.

Our next event to be held in 2005 will be a charity golf day. Planning is underway and details will be provided closer to the event. If you are interested in information on attending or sponsoring opportunities for the event please contact Jody Clooney on jclooney@cabrini.com.au or 0417 330 297.

Chemotherapy boosted by Prozac

The major method of treating malignant tumours is through chemotherapy and exciting new research through the TelAviv University (TAU) has discovered a possible means of making chemotherapy more effective.

The effectiveness of chemotherapy is reduced in over 80 percent of cases through a phenomenon known as multi-drug resistance (MDR) and researchers at TAU have discovered that Prozac (fluoxetine) inhibits this process of multi-drug resistance and improves the response of the tumour cells to chemotherapy medication, safely and without toxic side-effects. Clinical testing is still required.

Reference: TelAviv University News, Winter/Spring 2005, pg:14

Healthy Living

What is Gas?

The digestive tract is made up of the oesophagus, stomach, small intestine and large intestine (colon). Common causes of gas in the digestive tract are:

- Air swallowed while eating
- Eating non-digestible foods (such as fibre)
- Eating non-tolerated foods (as in lactose intolerance)
- Acute pancreatitis, chronic pancreatitis, or pancreatic insufficiency
- Irritable bowel syndrome (with abdominal pain)
- Malabsorption (inadequate absorption of nutrients from the intestinal tract) often accompanied by diarrhoea
- Use of antibiotics

Gas can be eliminated from the body through belching or as flatus resulting from bacterial fermentation.

Flatus

Flatus is a normal bodily process and the amount depends on the individual resulting in a wide range of what is considered "normal". On average the adult male passes gas up to fourteen times a day. The elderly are more prone to passing gas more frequently. The amount and mixture of gases depend on the types of bacteria in the colon. The types of gases present include hydrogen, carbon dioxide, and in some people methane. Trace gases such as hydrogen sulfide are odor causing. The types of foods that produce gas vary from person to person.

Swallowed air

Each time we swallow small amounts of air enter the stomach. This gas is usually passed into the small intestine where part of it is absorbed. The remaining gas travels into the colon where it is passed out through the rectum.

Excessive swallowing of air can be caused through stress, postnasal drip, chewing gum, smoking, rapid eating, poorly fitting dentures, talking while eating, skipping meals, carbonated drinks.

Treatment

Gas can be reduced through changing diet, medications and reducing the amount of air swallowed.

Points to Remember

- Everyone has gas in the digestive tract.
- People often think they pass too much gas when they don't.
- Passing gas frequently is normal.

Foods that cause gas

Legumes (presoaking reduces the gas producing potential of beans)

Vegetables: artichokes, asparagus, broccoli, cabbage, brussel sprouts, cauliflower, cucumbers, green peppers, onions, radishes

Fruits: apples, peaches, pears, prunes, raisins
Dairy: Milk and milk products such as cheese and ice cream

Other: carbonated drinks, Mexican foods, baked beans, whole grains, bran, packaged foods prepared with lactose such as bread, cereal and salad dressing, foods containing sorbitol such as sorbitol, dietetic foods and sugar free lollies, Medications that increase gas production such as narcotic, and calcium channel blockers.

Disclaimer: All content is provided for general information only, and should not be treated as a substitute for the medical advice of your own doctor or any other health care professional.

DEPARTMENTAL RESEARCH SCHOLARSHIP

In April 2005 the Cabrini Monash University Department of Surgery launched the Alan, Ahda and Evi Selwyn Family Research Scholarship in Clinical Surgery. This research scholarship, which is valued at \$10,000 will be awarded annually in September to support a clinical research project related to the field of surgery. For more details contact the Cabrini Institute on: 9508 1757.

Optiscan Pilot Study to include Upper Gastrointestinal Tract

2005 will see the expansion of the Optiscan confocal endomicroscope study to include upper gastrointestinal examinations.

The flexible confocal endomicroscope is a device which uses laser light and optical technology to visualize the cellular structure of living tissue. Compared to conventional endoscopes currently in use to visualize the gastrointestinal tract, the Optiscan imaging device has the advantage of much greater magnification and resolution. Digital images of cells magnified 1000-fold appear in real time on a computer screen, enabling immediate observation of cellular level morphology and architecture. It is hoped that the microscopic detail obtained with the confocal endomicroscope may provide diagnostic information that enables targeted biopsies in the gastrointestinal tract resulting in early disease detection and treatment intervention which can improve outcomes for the patient. Enquiries regarding the study can be directed to Helen Mason on 9508 1651 or helen.mason@colorectal.com.au

Chairman's Report (cont.)

The Optiscan association is continuing with encouraging results. This technology allows the lining of the large bowel to be examined invitro at a magnification never before possible (x1000). This facilitates immediate histological diagnosis of a range of bowel conditions. We have been pleased to have the opportunity to collaborate with Dr Ralf Kiesslich at the *University of Mainz* and this cooperative has resulted in the joint publication of a paper in the high impact journal of *Gastroenterology* (2004 Sep;127(3):706-13

Members of the Department recently contributed to manuscripts for inclusion as chapters into major surgical texts soon to be published. They are:

1. Large Bowel Obstruction. AL Polglase. Textbook of Surgery 3rd edn JJ Tjandra, GJA Clunie, RSJ Thomas. *BlackwellScience Asia*
2. Rare tumours of the anus and rectum. PJ McMurrick, PW Carne, M Johnson, Surgery of the alimentary tract, 6th edn. *Shackelford*
3. Chronic ulcerative colitis: surgical options. PJ McMurrick, Current therapy in colon and rectal surgery 2nd edn. VW Fazio, JM Church, CP Delaney. *Elsevier Mosby*

Recently the department has hosted two internationally known surgeons at Cabrini Health, Malvern. Mr Ian Lindsay, Colorectal Surgeon at Oxford, UK; spoke on "A New Procedure for Rectal Prolapse" and Professor John Monson, University of Hull, UK; spoke on "New Technology in Colorectal Surgery". Astramedex P/L kindly sponsored the technology meeting and profiled a bioresorbable barrier called SurgiWrap, which is designed to address post surgical adhesions with applications in laparoscopic and open procedures.

Professor Ed Byrne Dean of the Faculty of Medicine, Nursing and Health Sciences at Monash University recently addressed the medical staff at Cabrini Hospital on the new 5-year medical undergraduate teaching program. Many clinicians have been concerned that important components of undergraduate teaching have been down graded and this was an opportunity to engage the Dean in dialogue on this matter. Prof Byrne understood the views of the Cabrini clinicians and those views will be included in a process of re-evaluation of the course. Of interest is that the undergraduate teaching program at Cabrini continues to excel. It has expanded now to include a session at the skills lab at Royal Australasian College of Surgeons head quarters in Spring Street. It provides students with an opportunity for hands on experience with a range of techniques. This session is funded by the Cabrini Monash University Department of Surgery and is supervised by Mr Stephen Bell FRACS.

Current developments in faecal incontinence

Stephen W Bell FRACS

Faecal incontinence is a common, socially debilitating condition that is rarely discussed and often under-treated. Many people find it difficult to bring their symptoms to anyone's attention, and most suffer for long periods of time before coming to see an appropriate clinician. A significant proportion can be managed by simple, non-surgical methods. In the past patients not responding to conservative measures had relatively few options, including a number of invasive surgical procedures with varying degrees of success. These include overlapping sphincteroplasty, dynamic graciloplasty, and pelvic floor repair. Colostomy remains an appropriate option with excellent quality of life in many patients. Recently techniques have been borrowed from other specialities and applied to faecal incontinence with encouraging early results.

Sacral Nerve Stimulation (SNS) was initially a successful treatment for urinary incontinence and has been applied to faecal incontinence. This involves passing an electrode through the skin and placing it adjacent to a nerve root as it leaves the lower spine (usually the third sacral nerve root). A trial procedure is performed to assess function for one week, and if successful a permanent stimulator is placed under the skin to stimulate the nerve. This can then be turned on or off as required by a hand held programming device. The technique is considered in those with an intact external sphincter who have failed conservative measures.

Injectable sphincter augmentation (using Ethyl Vinyl Alcohol [EVOH] or Bioplastique [PTP or PTQ]) is a technique designed to narrow the anal canal in patients with passive faecal incontinence due to internal sphincter dysfunction. The products form a cushion to help seal the anal canal, but are compressible and therefore still allow the passage of stool. EVOH has been used in the lower oesophagus and is in the early phase of clinical trials in the anal sphincter. Like SNS it is a day case procedure and early results suggest a benefit in appropriately selected patients.

The Artificial Bowel Sphincter (ABS) is an implantable device with a balloon surrounding the anal canal. It can be filled or emptied by compressing a reservoir under the skin to allow passage of stool. It is a much more involved procedure for patients with intractable incontinence. There is a significant complication rate, however, in appropriately selected patients, when successful continence can be dramatically improved.

With SNS and EVOH there are now promising techniques that are minimally invasive and can bridge the gap between conservative measures and invasive procedures.

Further information on incontinence can be found at:

http://www.healthinsite.gov.au/topics/Faecal_Incontinence

<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/continence-info-faecal.htm>

National Continence Helpline freecall 1800 33 00 66.

(The Helpline can arrange telephone interpreters.)

National screening program delayed

The introduction of a national bowel-screening program promised in last year's election pledge has been delayed. With about 90 Australians dying each week from bowel cancer the Government pledged that every Australian aged over 55 would be screened for the disease by 2008. From July next year, people will be tested when they turn 55 and 66. But the program will be reviewed in 2008 before it is extended nationally.

CLINICAL RESEARCH ACTIVITIES 2005

APPROVe STUDY (VIOXX): A 1-year off study therapy extension to a multicenter, randomized, parallel-group, placebo-controlled, double-blind study with in-house blinding to determine the effect of 156 weeks of treatment with MK-0966 on the recurrence of neoplastic polyp of the large bowel in patients with a history of colorectal adenomas. FA Macrae, AL Polglase, W Johnson, I Jones, and interstate and overseas investigators

ALCCaS STUDY: Australasian, multicentre, prospective, randomised, clinical study comparing laparoscopic and conventional open surgical treatments of colon cancer in adults. P McMurrick, AL Polglase, P Carne, B Stewart, I Faragher, P Sitzler and interstate and overseas investigators.

PALLIATIVE RESECTION FOR COLORECTAL CARCINOMA: AL Polglase, C Ooi, A Tremayne, J Chong

THE MELBOURNE ASHKENAZI BOWEL STUDY STAGE II: Expansion of the phase I project in collaboration with Peter MacCallum Cancer Institute to establish genetic testing at Cabrini. H Debinski, P Waring, J Sambrook, AL Polglase

OPTISCAN PILOT STUDY: Examination of the human gastrointestinal tract using the flexible confocal endomicroscope. AL Polglase, FA Macrae, S Pianko, I Willet, S Woods, Optiscan Pty Ltd, CR Kennedy, Pentax Corporation, Cabrini Pathology, Department of Pathology, University of Melbourne.

SPECIALIST REFERRAL TO THE CANCER INFORMATION SUPPORT SERVICE: Project to evaluate the effectiveness of a telephone based support program for men newly diagnosed with colorectal or prostate cancer. Anticancer council in collaboration with AL Polglase, RJ Wale, R Snow.

CONTINUOUS INFUSION OF LOCAL ANAESTHETIC IN THE CONTROL OF PAIN FOLLOWING COLORECTAL SURGERY: A prospective randomized double blind trial to determine the effectiveness of local anaesthetic infusion. J Chee, AL Polglase, R Wale, S Woods, W Johnson, P Mc Murrick, C Ooi, J Chong

PROSPECTIVE DATA COLLECTION COMPARING DIFFERENT DATA COLLECTION TECHNIQUES: JS Bell, AL Polglase, P Mc Murrick, P Carne, J Chong

PROGNOSIS AFTER PALLIATIVE SURGERY FOR COLORECTAL CANCER. AL Polglase, C Ooi, P Carne, A Tremayne

TAZAC STUDY S Woods, C Ooi, J Chong

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MANUSCRIPTS IN THE PRESS

Factors influencing uptake of genetic testing for the APC I1307K mutation in a Jewish population. B Warner, A Polglase, LJ Curnow, HS Debinski, Journal of Genetic Counselling

A Fluorescence confocal endomicroscope for in vivo microscopy of the upper and lower gastrointestinal tract. AL Polglase W McLaren , S Skinner , R Kiesslich , P Delaney. Gastrointestinal Endoscopy

Book Chapter: Large Bowel Obstruction. AL Polglase , Textbook of Surgery 3rd edn JJTjandra, GJA Clunie , RSJ Thomas Blackwell Science Asia

Rare tumours of the anus and rectum. PJ McMurrick, PW Carne, M Johnson, Surgery of the alimentary tract, 6th edn Shackelford.

Maternal and Fetal Outcomes after Colectomy for Fulminant Ulcerative Colitis During Pregnancy: Case Series and Literature Review. Dozois E, Drelichman E, Wolff B, Carne PWG et al Diseases of the Colon and Rectum, June 2005

Publications in 2004-2005

Confocal laser endoscopy for diagnosing intraepithelial neoplasias and colorectal cancer in vivo. Kiesslich R, Burg J, Vieth M, Gnaendiger J, Enders M, Delaney P, Polglase A, McLaren W, Janell D, Thomas S, Nafe B, Galle PR, Newrath MF. Gastroenterology. 2004 Sep;127(3): 706-13.

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Update on Laparoscopic Colon Cancer Resection. SW Bell, Gastrointestinal Cancer Update 2004 Dec:43:9

Primary Rectus Abdominus Myocutaneous Flap for Repair of Peritoneal and Vaginal Defects After Extended Abdominoperitoneal Resection. SW Bell, N Dehini, M Chaouat, JC Lifante, R Parc, E Turet. British Journal of Surgery April 2005;92(4):482-486

Stents or open operation for palliation of colorectal cancer: retrospective, cohort study of perioperative outcome and longterm survival. Carne PW, Frye JN, Robertson GM, Frizelle FA, Dis Colon Rectum. 2004 Sep;47(9):1455-61. Epub 2004 Jul, 8.

Abdominoperitoneal resection or low Hartmann's procedure. Fry JN, Carne PW, Robertson GM, Frizelle FA, ANZ J Surg. 2004 Jul;74(7):537-40

Quality of Life after rectal excision. Frye JN, Carne PW, Robertson GM, Frizelle FA, Colorectal Dis. 2004 Jul;6(4):294

Chronic Ulcerative Colitis: surgical Options. PJ McMurrick. Current therapy in Colon and Rectal Surgery, VW Fazio, JM Church, CP Delaney, Elsevier Mosby 2nd Edn

Local Recurrence following surgical Treatment for Carcinoma of the lower rectum. A Polglase, S Grodski, J Chee, A Treymane, P Bhathal ANZ J Surg 2004

Laparoscopic Gastric Banding: Safe and Modestly Successful. AT Tweddle, SDS Woods, S Blamey, Aust NZ J Surg. 2004



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